

Making our actions consistent with our scientific predictions

Erica Thompson
Imperial College, London

Despite the stories which repeatedly surface suggesting that the public has 'lost faith in scientists' (an interesting turn of phrase in itself), I do find that non-scientist acquaintances are keen to ask me about climate change, global warming or the latest report they read in the papers about the snow during the winter. My research concerns a small corner of climate science, and it would be easy for me to shrug off questions that are 'not in my area', but in doing that I would leave the debate to the even less-informed so I try to answer questions as far as I am able, and am usually well-received. So I do believe that climate scientists remain an important and more-or-less trusted source of information for the public (at least, more trusted than is the government or the media).

I worry, though, that we do not always give the right impression. Does flying around the world to conferences suggest a real and urgent concern for the effect of greenhouse gas emissions on the climate? 'We need to network in order to do good research' may well be true, but it need not entail large numbers of people regularly flying great distances. The conference environment of accidental meetings and networking opportunities is particularly valuable, but is not geographically dependent. At Imperial College and in partnership with the Nature network, we have hosted virtual conferences in the online platform Second Life which allow people to walk around a conference room as avatars, make presentations, have one-to-one and group conversations and see which posters attract the most interest. The concept could be extended. Travel would not be eliminated completely: fruitful collaborations might include (as they do now) longer stays at other places. But many long-distance trips seem designed more for the purpose of being a convenient holiday destination than a real scientific necessity: is it really crucial for anyone to go

to both AGU and EGU (American and European geophysics conferences) or to be flown across a continent to give a few seminars? If one were in a small African country with few universities and no other researchers in a similar field then it clearly is necessary, but not from Europe or the US.

Especially when funding for climate research is provided by governments, with their expressed aim of preventing dangerous climate change, it seems odd that we do not consider these issues to be more important. There is a large and carbon-intensive industry in the fields of climate projection, climate consultancy and climate speculation. I have even found it difficult to persuade my department to take the trivial step of ordering only vegetarian sandwiches for events: this involves only ticking a different box on an order form and admittedly makes little difference to emissions, but sends an important message that we are prepared to act in a manner consistent with our research.

Even more important from the outsider's perspective is the personal behaviour of scientists. Again, it is easy (and common) to shrug off such concerns as being irrelevant to the science. And, indeed, it is irrelevant to climate science and to the climate how any given scientist chooses to behave. But it is critically important to scientific communication. We should be the first to recognise the necessity of acting consistently. Is it consistent to say that I believe my research merits action by anyone else if I do not believe it merits action from myself? And even if I can come up with some convoluted argument why I should be exempt, will it convince anyone else? Al Gore's position, for example, is seriously undermined by his own carbon-intensive lifestyle.

Consistency makes a difference. If I, as a climate scientist, choose nevertheless to fly halfway across the world for a holiday, I would not blame friends for inferring that I do not worry about climate change and they should not either. In actual fact, I choose not to do that and I try insofar as my circumstances allow (another controversial phrase) to reduce my carbon and energy use in other ways. When I then make assertions about climate and energy to others, people are more willing to engage with my viewpoint. The moral high ground is a very unfairly maligned position: it

carries more strength than our amoral economic system would like. With apologies to Archimedes, *give me a moral high ground to stand upon, and I can move the earth.*

Now perhaps the well-meaning climate scientist thinks 'Why are you targeting me? I'm not the problem, it's China/capitalism/corporations/Christianity/culture/coal and you have to change THAT before asking me to change!' And I fully agree that there are many enormous systemic problems with the way we as a society choose to behave which are beyond the control of individuals. But if we choose to do nothing ourselves, these systemic problems are only ever likely to get worse. The stranglehold of corporations on political discourse remains strong. If change will not come from the top down, it must come from the bottom up.

The bottom line: do we as climate scientists genuinely believe that the balance of evidence suggests climate change represents a real threat to the wellbeing of ourselves or of future generations? If not, then the IPCC is misrepresenting us and we should start saying so! But if we do, then we have a responsibility to behave in a manner consistent with that belief. That means making real and meaningful efforts to reduce our own carbon footprints, both at an individual and institutional level.

And in any case, we have no choice. The UK's 'legally-binding' target of an 80% reduction means that, by 2050, one long-haul flight per year will use up more than an individual's fair share of emissions. If we are going to continue to do good science in a low-carbon future, then we need to find more efficient ways of working. As well as providing moral leadership, those researchers, universities and institutions who explore new, low-carbon paradigms now will become the architects of new collaboration methods, and the leaders of future science. Don't get left out!

Correspondence to: Erica Thompson,
Grantham Institute for Climate Change,
Imperial College London,
Exhibition Road,
South Kensington, London,
SW7 2AZ, UK

e.thompson07@imperial.ac.uk

© Royal Meteorological Society, 2011

DOI: 10.1002/wea.817